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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,621	08/14/2001	Richard Franklin Wormsbecher	W9495-01	9407
7590	10/16/2003		EXAMINER	
Charles A. Cross W. R. Grace & Co.-Conn. Patent Dept. 7500 Grace Drive Columbia, MD 21044-4098			THERKORN, ERNEST G	
			ART UNIT	PAPER NUMBER
			1723	

DATE MAILED: 10/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

### Application No.

09/929,621

### Applicant(s)

WORMSBECHER, RICHARD  
FRANKLIN

### Examiner

Ernest G. Therkorn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) 10-54 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 and 7-9 are rejected under 35 U.S.C. 102(B) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over each of Ho Chang (U.S. Patent No. 4,029,583), Boos (U.S. Patent No. 6,074,555), and Hanggi (U.S. Patent No. 5,667,674). The claims are considered to read on each of Ho Chang (U.S. Patent No. 4,029,583), Boos (U.S. Patent No. 6,074,555), and Hanggi (U.S. Patent No. 5,667,674). However, if a difference exists between the claims and each of Ho Chang (U.S. Patent No. 4,029,583), Boos (U.S. Patent No. 6,074,555), and Hanggi (U.S. Patent No. 5,667,674), it would reside in optimizing the elements of each of Ho Chang (U.S. Patent No. 4,029,583), Boos (U.S. Patent No. 6,074,555), and Hanggi (U.S. Patent No. 5,667,674). It would have been obvious to optimize the elements of each of Ho Chang (U.S. Patent No. 4,029,583), Boos (U.S. Patent No. 6,074,555), and Hanggi (U.S. Patent No. 5,667,674) to enhance separation.

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Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over each of Ho Chang (U.S. Patent No. 4,029,583), Boos (U.S. Patent No. 6,074,555), and Hanggi (U.S. Patent No. 5,667,674) in view of Goetz (U.S. Patent No. 5,055,194). The claim differs from each of Ho Chang (U.S. Patent No. 4,029,583), Boos (U.S. Patent No. 6,074,555), and Hanggi (U.S. Patent No. 5,667,674) in reciting a magnetically responsive substance. Goetz (U.S. Patent No. 5,055,194) (column 1, lines 13-17 and column 9, lines 13-21) discloses that use of a magnetic core allows the material to be used for a magnetically stabilized fluidized bed. It would have been obvious to use a magnetic core in each of Ho Chang (U.S. Patent No. 4,029,583), Boos (U.S. Patent No. 6,074,555), and Hanggi (U.S. Patent No. 5,667,674) because Goetz (U.S. Patent No. 5,055,194) (column 1, lines 13-17 and column 9, lines 13-21) discloses that use of a magnetic core allows the material to be used for a magnetically stabilized fluidized bed.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boos (U.S. Patent No. 6,074,555) in view of Ho Chang (U.S. Patent No. 4,029,583). At best, the claim differs from Boos (U.S. Patent No. 6,074,555) in reciting use of silica gel. Ho Chang (U.S. Patent No. 4,029,583) (column 4, lines 13-15) discloses that silica and silica gel are interchangeable supports. It would have been obvious to use silica gel in Boos (U.S. Patent No. 6,074,555) because Ho Chang (U.S. Patent No. 4,029,583) (column 4, lines 13-15) discloses that silica and silica gel are interchangeable supports.

The remarks urge patentability based upon the allegation that Ho Chang (U.S. Patent No. 4,029,583) does not anticipate claim 1. However, the first material listed in reaction 5 which appears at the bottom of columns 7 and 8 of Ho Chang (U.S. Patent

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No. 4,029,583) and the first material listed in reaction 6 on column 9, line 35 of Ho Chang (U.S. Patent No. 4,029,583) anticipates the claims.

The remarks urge patentability based upon the allegation that Boos (U.S. Patent No. 6,074,555) does not anticipate claim 1. However, Boos (U.S. Patent No. 6,074,555) on column 3, line 5 discloses use of a support ending in  $\text{CH}_2\text{OH}$ . The open format claim is considered to read on this support. In addition, the third species on claim 3 is considered to read on column 4, line 2's "hydroxyethoxy."

The remarks urge patentability based upon the allegation that Hanggi (U.S. Patent No. 5,667,674) does not anticipate claim 1. However, Hanggi (U.S. Patent No. 5,667,674) discloses on column 1, lines 64-68 and column 2, lines 50-54 a derivatized alkyl group, i.e., hydroalkyl, having one carbon atom. In addition, Example 12 of Table I discloses use of a support ending in  $\text{CH}_2\text{OH}$ . As such, the claims are considered to read on both supports disclosed by Hanggi (U.S. Patent No. 5,667,674).

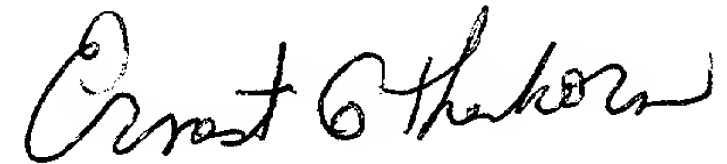
**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to E. Therkorn at telephone number (703) 308-0362.



**Ernest G. Therkorn**  
**Primary Examiner**  
**Art Unit 1723**

EGT  
October 8, 2003